

# **THE COST OF COMMUNITY SERVICES IN FORSYTH COUNTY**

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## Introduction

In counties near rapidly-growing urban areas, there is considerable debate over the desirable mix of land uses and the role that local government can and should play in affecting the rate at which new land uses supplant traditional ones. Forsyth County is typical of such counties. The county's economic growth, as well as that of the adjoining counties of the Piedmont Triad, have created unprecedented demands for residential and commercial development, particularly in the county's rural areas.

On the one hand, this situation has been welcomed by many because it has created significant economic development opportunities for the county's citizens, as well as a significant increase in the county's revenue base. On the other hand, there is concern that the increased local government expenditures on community services needed to accommodate accelerated residential and commercial development may exceed the contribution of that development to the county's revenue base.

One important element of public debate over appropriate land use policies is whether or not the increased county government expenditures on community services needed to accommodate residential and commercial development exceed the contribution of that development to the county's revenue stream. This report presents the findings of a research project aimed at addressing this specific issue. The research quantifies the contribution to local government revenues of various types of land uses (residential, commercial/industrial,<sup>1</sup> and agricultural), and the demands on local government financial resources of those same land uses. This "snapshot" of current revenues and expenditures allows an assessment of the costs and benefits of different land uses from the perspective of local government finances.

The analysis presented here employs a methodology established by the American Farmland Trust, one that has been used in numerous Cost of Community Services (COCS) studies throughout the U.S. Like those studies, the current research was motivated by two questions: (1) Do the property taxes and other revenues generated by residential land uses exceed the amount of publicly-provided services supplied to them? (2) Does the fact that farm and forest

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<sup>1</sup> For simplicity, the term "commercial" will denote both commercial and industrial land uses for the remainder of this report. Likewise, "agricultural" will refer to farm and forest land uses.

lands are taxed on the basis of their Present Use Value—instead of their potential value in residential or commercial uses—mean that they are contributing less in tax revenues than the value of publicly provided services they receive?

As has been found in other COCS studies, the answer to each of these questions is “no” for Forsyth County. The residential sector contributes 64¢ to the county’s coffers for each dollar’s worth of services that it receives. Commercial and industrial land uses are the largest net contributors to the public purse, contributing \$4.21 in revenues for each dollar of publicly provided services that they receive. Despite being taxed on the basis of current land uses, property in agricultural land uses is found to be a net contributor to the local budget, generating \$2.16 in revenues for every dollar of public services that it receives.

At the outset, it is important to recognize two important limitations of analyses such as the one presented here. First, COCS studies highlight the relative demands of various land uses on local fiscal resources *given the current pattern of development*. One should be cautious in extrapolating from the results of studies such as this in order to gauge the impact of future patterns of development on local public finance. Nonetheless, the results of studies such as this are useful in informing debates over such issues as whether or not alternative types of land uses are likely to contribute more in tax dollars than they demand in the way of services.

Second, the current study in no way deals with the *social* value of each of these forms of development—i.e., their contribution (positive or negative) to the well-being of the county’s citizens. Rather it focuses on the more narrow issue of whether or not these land uses “pay their own way” with regard to county revenues and expenditures. It is important to bear in mind that there is nothing sacred about an exact balance between revenues and expenditures associated with a particular land use, even when balancing the local budget is an overriding priority. Indeed, one of the primary functions of a local government is to redistribute local financial resources such that services desired by citizens are supplied, even when those services cannot pay for themselves. Determining the optimal distribution of those resources is a public policy issue to be resolved in the political arena. A study such as this fits into the process wherein such issues are resolved by shedding light on the relative costs and benefits of the specific distribution of financial resources given the existing pattern of development.

## Methodology

The basic approach used in this research was quite simple. Working from the most recent available county financial data, revenues and expenditures were allocated among three specific land use categories: (a) residential; (b) commercial; and (c) agricultural. This process was carried out in conjunction with a series of telephone interviews and email exchanges with a variety of local officials knowledgeable about the workings of specific departments.

Once revenues and expenditures were allocated to specific land use categories, the ratio of revenues to expenditures was computed for each. A revenue-expenditure ratio greater than 1.00 indicates that that sector's contribution to the public purse exceeds its use of public funds. Conversely, a revenue-expenditure ratio less than 1.00 indicates that the sector's use of publicly financed services exceeds its contribution to the local budget.

The basis for the current analysis is the actual expenditures recorded for the 2016-2017 fiscal year reported in the audited *Forsyth County North Carolina Comprehensive Annual Financial Report for the Fiscal Year Ending June 30, 2017*. As noted above, the allocation of these data to specific sectors was done in consultation with a variety of local officials (listed in the Acknowledgements). These individuals were best equipped to assess the extent to which the various land uses partake of the services provided by their departments. Where feasible, expenditures were allocated to land use categories using available data on staff salaries or activity records.

Often, existing records were not amenable to being broken out into various land use categories. In many of these cases, we relied on a local official's best guess of how their department's efforts were allocated. Where the relevant officials were unable to make such a guess, one of two allocation schemes was used. For services that exclusively benefit households (as opposed to commercial establishments)<sup>2</sup>—for example, public schools and library services—100% of expenditures were allocated to the residential sector.<sup>3</sup> For departments whose activities

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<sup>2</sup> Note that the quality of "residential" services such as public schools may well have a positive influence on business formation, particularly the attractiveness of the county to firms considering relocation. These spillover effects are ignored here, however, because the information needs for quantifying them lie well beyond the scope of this research.

<sup>3</sup> Forsyth County separates the farm business from the farm residence, assessing the property value of farm residences in the same manner as any other residences. For this reason, farm residences were included in the residential land use category throughout the analysis.

benefited both residences and businesses (including agricultural businesses), expenditures were allocated based on the proportion of total property value accounted for by each land use category. This “default” breakdown of assessed property valuation for 2016-2017 was 53.4% residential, 46.1% commercial, and 0.5% agricultural. The expenditures of most of the county’s general administration departments were allocated in this way.

Revenues were handled in a manner similar to expenditures. Property tax revenues were allocated to specific land use categories based on the January 2017 property assessments. Taxes and other revenue sources that are linked directly to commercial activities—for example, Article 39 sales taxes<sup>4</sup>—were allocated exclusively to the commercial sector. Revenues from sources associated exclusively with households (such as recreation fees) were allocated to the residential sector. Revenues raised by specific county government departments from fees charged for services or from inter-governmental transfers were allocated based on detailed records made available by the Forsyth County Finance Department. Any remaining revenues that could not be directly allocated in these ways (e.g., interest income) were allocated according to the “default” proportions of total property value accounted for by each land use category.

## Results

A detailed breakdown of revenues sources is found in Appendix Table 1. Total county general fund revenues for 2016-2017 were just under \$396 million. About 62.3% of this money came from ad valorem property taxes, while another 15.7% came from sales taxes.

Table 1 summarizes the overall breakdown of county expenditures for the 2016-2017 fiscal year. More detailed information is found in Appendix Table 2. Current spending on human services<sup>5</sup> and education departments accounted for a bit more than half of the total budget; and expenditures related to servicing the county’s debt—nearly all of which is for financing public schools—amounts to an additional 17% of the budget. All school expenditures, and nearly all of the activities of the health and human services departments are exclusive to the residential sector.

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<sup>4</sup> The state distributes Article 39 sales tax revenues back to counties on a point-of-sale basis. Article 40 and 42 sales taxes are distributed back to counties based on county population; revenues from these sources were allocated to residential land uses. Article 44 sales taxes are distributed to counties in part on the basis of point of sale and in part on the basis of county population; accordingly, these were allocated to residential and commercial land uses on a 50-50 basis.

<sup>5</sup> Health and human services include the Social Services, Health Services, and Veteran’s Services departments.

Hence, the large “footprint” of these two departments in county government—amounting to more than two-thirds of all expenditures—has a dominant impact on the results of this study.

Table 2 summarizes revenues and expenditures by land use category. Expenditures exceeded revenues for the residential land use category, while revenues exceeded expenditures for the commercial and agricultural land use categories. The computed revenue/expenditure ratios quantify the extent to which each of the three land use categories is either a net contributor or a net drain on Forsyth County’s financial resources. For comparative purposes, the bottom of the table provides the results from some 103 other Cost of Community Services studies that have been conducted throughout the U.S., as well as thirteen studies that were conducted in Wake, Alamance, Orange, Chatham, Gaston, Henderson, Franklin, Durham, Guilford, Yadkin, Pitt, Catawba, Davie, and Iredell Counties over the course of the past fifteen years.

The revenue/expenditure ratio for the residential land use category is 0.635. This implies that for each dollar in property tax and other revenues generated by residential land uses, the county spends \$1.57 to provide services supporting those land uses. In other words, the residential sector is on balance a net user of local public finances. On the other hand, the other two land use categories are net contributors to local fiscal resources. The revenue/expenditure ratio of 2.164 for agriculture implies that revenues substantially exceed expenditures for this land use category. The commercial land use category stands out as having the highest revenue/expenditure ratio (4.210). This result indicates that the county spends about 24¢ on services benefiting commercial and industrial establishments for every public dollar generated by those establishments.

Finally, Table 3 presents an analysis which computes the residential property value needed to generate an exact balance between average revenues contributed by the 110,873 single-family housing units in the county and the average value of public services consumed by households. This “breakeven” house price was computed assuming that any new household would consume the average amount of services reflected in the 2016-2017 budget—i.e., that they would possess the average number of school kids, consume an average amount of public health and social services, etc. The computation further assumes that any new household would contribute the average amount of non-property tax revenues generated by existing residential properties, and

takes as a benchmark the 2017 property tax rate of 72.35¢ per \$100. Based on these assumptions, the breakeven property value is computed to be \$325,680.

## **Discussion**

The results presented above provide answers to the two questions posed at the beginning of this report. As regards the public services provided by Forsyth County, commercial and industrial land uses emerge as being the largest net contributor to local financial resources. In contrast, the value of public services provided to residential land uses exceed the property taxes and other revenues that they contribute to the county budget. This finding contrasts with claims that are sometimes made that residential development is a boon to county finances due to its expansion of the property tax base. It would appear that the very large footprint of the education and health and human services expenditures in the overall county budget plays a dominant role in explaining this phenomenon. Finally, agricultural lands more than pay their own way. This is true despite these properties being taxed on the basis of their current use (as opposed to their potential use were they to be transformed into commercial or residential uses).

Qualitatively, these findings for Forsyth County are consistent with the findings of nearly every Cost of Community Services study that has been carried out in other communities throughout the U.S. The degree of cross-subsidization of the residential sector—in particular, the extent to which the Forsyth County’s commercial sector pays for services provided to its residential sector—is somewhat larger than the median in other studies that have been conducted nationally. Closer to home, the relative balance of revenues and expenditures for the residential land use category is on the low end compared to other counties in North Carolina. Correspondingly, for the commercial and agricultural land use categories, there is a somewhat greater gap between revenues and expenditures for Forsyth County than has been found elsewhere in North Carolina.

As was stressed at the outset, some degree of subsidization of certain land uses by other land uses is to be expected in virtually every community. The distribution of revenues and expenditures among various land uses in Forsyth County that has been computed here is based on current land use patterns in the county. Determining the appropriateness of this distribution, either now or in the future, is an issue that can only be resolved in the political arena.



**Table 1. Forsyth County Expenditures for 2016-2017**

<b>Category</b>	<b>Expenditure</b>	<b>Share</b>
Education	129,938,505	32.9%
Human services	76,864,912	19.4%
Public safety	69,548,490	17.6%
Debt payments	57,978,350	14.7%
General government	39,040,088	9.9%
Culture and recreation	15,064,741	3.8%
Community and economic development	3,499,791	0.9%
Environmental protection	2,497,067	0.6%
Cooperative Extension	807,656	0.2%

- a. Health and human services include the Social Services, Health Services, and Aging Services departments.
- b. Debt service consists primarily (93%) of principle and interest payments on loans for public schools capital projects.

**Source:** *Forsyth County North Carolina Certified Annual Financial Report for the Fiscal Year Ending June 30, 2017*

**Table 2. Revenues vs. Expenditures in Forsyth County**

	<b>Residential</b>	<b>Commercial</b>	<b>Agricultural</b>
<b>Revenues</b>	\$225,513,556 (57.0%)	\$169,092,279 (42.7%)	\$1,275,053 (0.3%)
<b>Expenditures</b>	\$355,128,089 (89.7%)	\$40,163,637 (10.1%)	\$589,162 (0.1)
<b>Revenues/Expenditures ratio<sup>a</sup></b>	<b>0.635</b>	<b>4.210</b>	<b>2.164</b>

**Revenue/Expenditure ratios from national studies<sup>b</sup>**

Minimum	0.47	0.96	1.01
Median	0.87	3.57	2.78
Maximum	0.99	20.00	50.00

<i>Forsyth County (2016)</i>	<i>.64</i>	<i>4.21</i>	<i>2.61</i>
Wake County (2001)	0.65	5.63	2.12
Alamance County (2006)	0.68	4.29	1.69
Orange County (2006)	0.76	4.21	1.38
Chatham County (2007)	0.87	3.01	1.72
Gaston County (2008)	0.81	2.41	1.13
Henderson County (2008)	0.86	2.52	1.03
Franklin County (2009)	0.89	1.90	1.32
Durham County (2010)	0.87	3.03	1.70
Guilford County (2010)	0.74	3.44	1.62
Yadkin County (2011)	0.89	2.63	1.63
Pitt County (2012)	0.77	2.76	1.62
Catawba County (2013)	0.81	1.87	1.34
Davie County (2014)	0.88	2.01	1.50
Iredell County (2015)	0.73	3.37	2.14
Median	0.81	3.01	1.62

a. This ratio measures the amount of county revenue contributed by a given land use sector for each dollar in public services used by that sector.

b. These figures are derived from 103 Cost of Community Services summarized on the American Farmland Trust website ([http://www.farmlandinfo.org/sites/default/files/COCS\\_08-2010\\_1.pdf](http://www.farmlandinfo.org/sites/default/files/COCS_08-2010_1.pdf)).

**Table 3. Breakeven Analysis for Residential Property Value in Forsyth County**

(1) Property tax rate (\$ per \$100)	0.7235
(2) Residential Non-Property Tax Revenue Contribution in 2016-2017	\$ 93,878,555
(3) Total residential expenditures in 2016-2017	\$ 355,128,089
(4) Total Expenditures needing to be paid for by property taxes [(3) - (2)]	\$ 261,249,534
(5) Number of residential properties in the county	110,873
(6) Per household expenditures needing to be paid for by property taxes [(4) ÷ (5)]	\$ 2,356
<b>Breakeven property value [100 × (6) ÷ (1)]</b>	<b>\$ 325,681</b>

**Appendix Table 1. Forsyth County Revenues by Land Use Category for 2016-2017**

	<b>Total</b>	<b>Residential</b>	<b>Commercial</b>	<b>Agricultural</b>	<b>Breakdown<sup>a</sup></b>
<b>Ad Valorem Taxes</b>	<b>246,512,903</b>	<b>131,635,001</b>	<b>113,747,283</b>	<b>1,130,619</b>	
Taxes	244,122,422	130,358,513	112,644,254	1,119,655	default
Prior years	1,433,787	765,625	661,586	6,576	default
Interest and fees	956,694	510,863	441,443	4,388	default
<b>Occupancy Taxes</b>	<b>787,567</b>	<b>0</b>	<b>787,567</b>	<b>0</b>	0-100-0
<b>Local Option Sales</b>	<b>30,617,374</b>	<b>6,986,342</b>	<b>23,631,032</b>	<b>0</b>	
Article 39	29,048,626	0	29,048,626	0	0-100-0
Article 40	15,447,525	15,447,525	0	0	100-0-0
Article 42	17,477,573	0	17,477,573	0	0-100-0
Article 44	9,783	4,892	4,892	0	50-50-0
<b>Other Taxes</b>	<b>475,501</b>	<b>0</b>	<b>475,501</b>	<b>0</b>	0-100-0
<b>Intergovernmental Revenues</b>	<b>53,813,420</b>	<b>51,230,376</b>	<b>2,529,231</b>	<b>53,813</b>	95.2-4.7-.0.1
<b>Charges for Services</b>	<b>22,091,047</b>	<b>18,247,205</b>	<b>3,799,660</b>	<b>44,182</b>	82.6-17.2-0.2
<b>Investment Earnings</b>	<b>1,106,281</b>	<b>590,741</b>	<b>510,466</b>	<b>5,074</b>	default
<b>Other</b>	<b>8,273,030</b>	<b>7,520,184</b>	<b>711,481</b>	<b>41,365</b>	90.9-8.6-0.5
<b>TOTAL REVENUES</b>	<b>395,880,888</b>	<b>225,513,556</b> (57.0%)	<b>169,092,279</b> (42.7%)	<b>1,275,053</b> (0.3%)	

a. Percentage breakdown by land use category (residential-commercial-agricultural). Default percentages were based on 2017 assessed property valuation (residential – 53.4%; commercial –46.1%; agricultural - 0.5%).

**Appendix Table 2. Forsyth County Expenditures by Land Use Category for 2016-2017**

	<b>Total</b>	<b>Residential</b>	<b>Commercial</b>	<b>Agricultural</b>	<b>Breakdown<sup>a</sup></b>
<b>General Government</b>	<b>39,040,088</b>	<b>20,905,745</b>	<b>17,957,531</b>	<b>176,812</b>	
Budget and management	490,577	261,962	226,365	2,250	default
Management information services	5,838,300	3,117,584	2,693,939	26,777	default
Finance	2,386,587	1,274,409	1,101,232	10,946	default
General services	12,679,355	6,770,627	5,850,575	58,153	default
Human resources	954,349	509,611	440,361	4,377	default
Planning	1,417,326	756,835	653,990	6,500	default
Purchasing	110,707	59,116	51,083	508	default
MapForsyth	771,547	411,997	356,011	3,539	default
Attorney	1,526,736	815,259	704,475	7,002	default
Board of elections	1,550,235	827,807	715,318	7,110	default
County commissioners and manager	1,133,851	605,463	523,188	5,200	default
Register of deeds	1,309,300	699,151	604,144	6,005	default
Tax administration	6,622,779	3,536,486	3,055,918	30,375	default
Aid to other governmental agencies	150,000	80,098	69,214	688	default
Other services and adjustments	1,609,281	859,337	742,563	7,381	default
Special appropriations	489,158	320,000	169,158	0	65.4-34.6-0
<b>Public Safety</b>	<b>69,548,490</b>	<b>56,540,794</b>	<b>12,935,694</b>	<b>72,002</b>	
Animal control	1,917,244	1,917,244	0	0	100-0-0
Emergency management	357,239	190,761	164,839	1,638	default
Interagency communications	1,169,507	624,503	539,640	5,364	default
Sheriff	45,756,570	35,415,585	10,295,228	45,756.57	77.4-22.5-0.1
Emergency services	16,850,300	15,841,315	999,055	9,930	94.0-5.9-0.1
Court services	475,243	253,774	219,289	2,180	default
Medical examiner	366,300	366,300	0	0	100-0-0
Youth center	1,100,814	1,100,814	0	0	100-0-0
Nondepartmental other services	1,555,273	830,498	717,642	7,133	default

**Appendix Table 2. Forsyth County Expenditures by Land Use Category for 2016-2017 (continued)**

	<b>Total</b>	<b>Residential</b>	<b>Commercial</b>	<b>Agricultural</b>	<b>Breakdown<sup>a</sup></b>
<b>Environmental protection:</b>	<b>2,497,067</b>	<b>1,353,453</b>	<b>1,088,342</b>	<b>55,272</b>	
NCCES - conservation of nat. resources	159,103	105,008	9,546	44,549	66-6-28
Env. assistance and protection	2,296,883	1,226,509	1,059,840	10,535	default
Inspections	31,578	16,862	14,571	145	default
Nondepartmental other services	9,503	5,074	4,385	44	default
<b>Human services:</b>	<b>74,916,128</b>	<b>73,799,128</b>	<b>1,117,000</b>	<b>0</b>	
Public health	21,269,708	20,152,708	1,117,000	0	94.7-5.3-0
Social services	52,260,472	52,260,472	0	0	100-0-0
Aging services	582,374	582,374	0	0	100-0-0
Special appropriations	46,520	46,520	0	0	100-0-0
Nondepartmental other services	757,054	757,054	0	0	100-0-0
<b>Culture and recreation:</b>	<b>15,064,741</b>	<b>15,064,741</b>	<b>0</b>	<b>0</b>	
Library	7,057,175	7,057,175	0	0	100-0-0
Parks and recreation	7,430,314	7,430,314	0	0	100-0-0
Special appropriations	320,000	320,000	0	0	100-0-0
Nondepartmental other services	257,252	257,252	0	0	100-0-0
<b>Community and Economic Dev't</b>	<b>3,499,791</b>	<b>548,747</b>	<b>2,951,044</b>	<b>0</b>	
Economic development	2,943,238	0	2,943,238	0	0-100-0
Housing	547,296	547,296	0	0	100-0-0
Nondepartmental other services	9,257	1,451	7,806	0	15.7-84.3-0
<b>Education (CES):</b>	<b>807,656</b>	<b>533,053</b>	<b>48,459</b>	<b>226,144</b>	
NC Cooperative Extension Service	771,613	509,264	46,296	216,051	66-6-28
Nondepartmental other services	36,043	23,788	2,162	10,092	66-6-28
<b>Intergovernmental:</b>	<b>1,948,784</b>	<b>1,948,784</b>	<b>0</b>	<b>0</b>	
CenterPoint Human Services	1,948,784	1,948,784	0	0	100-0-0

**Appendix Table 2. Forsyth County Expenditures by Land Use Category for 2016-2017 (continued)**

	<b>Total</b>	<b>Residential</b>	<b>Commercial</b>	<b>Agricultural</b>	<b>Breakdown<sup>a</sup></b>
<b>Education:</b>	<b>129,938,505</b>	<b>129,938,505</b>	<b>0</b>	<b>0</b>	
Forsyth Technical Community College	10,272,431	10,272,431	0	0	100-0-0
Winston-Salem/Forsyth County Schools	119,666,074	119,666,074	0	0	100-0-0
<b>Debt service:</b>	<b>57,978,350</b>	<b>53,919,866</b>	<b>4,000,506</b>	<b>57,978</b>	
General obligation bonds	49,419,015	45,959,684	3,409,912	49,419	100-0-0
Limited obligation bonds	8,559,335	7,960,182	590,594	8,559	100-0-0
<b>Current Expenditure</b>	<b>395,239,600</b>	<b>354,552,816</b>	<b>40,098,576</b>	<b>588,208</b>	
Revenues over expenditures	641,288	575,272	65,061	954	89.9-9.6-0.5
<b>Total Expenditure</b>	<b>395,880,888</b>	<b>355,128,089</b>	<b>40,163,637</b>	<b>589,162</b>	
		<b>(89.7)</b>	<b>(10.1%)</b>	<b>(0.2%)</b>	

a. Percentage breakdown by land use category (residential-commercial-agricultural). Default percentages were based on 2017 assessed property valuation (residential – 53.4%; commercial – 46.1%; agricultural – 0.5%).